

Software Packages

Software packages used to work with the data include:

- Microsoft Access and Excel spreadsheet software
- ArcView and ArcInfo geographic information system mapping software

5.2 Data Validation

5.2.1 Procedures Used to Validate Field Data

Field data generated in accordance with this workplan will include temperature (water and air), water pH and specific conductance. All field data will be validated by review of the field notes and equipment calibration logs to check that all procedures have been performed and the information has been recorded appropriately. This documentation will be considered sufficient to provide that proper procedures have been followed during the field investigations.

The CDM Project Manager will be responsible for periodically checking field sampling to verify that field measurements and sampling protocols have been observed and adhered to: The checks will include:

- Use of approved procedures
- Date/Time sampled
- Preservation method
- Chain-of-Custody protocols
- Field log books

5.2.2 Procedures Used to Validate Laboratory Data

Data validation provides an independent third party review in detail of written reports of laboratory analytical results and supporting QA/QC data to assess usability of the data for evaluating the effectiveness of a remedial alternative(s). For the first year of sampling, 100% of the data will be validated in accordance with USEPA National Functional Guidelines for data quality level objective levels IV and V. Based on the results from the first year of sampling and validation, future sampling events may be subject to less stringent validation procedures, as directed by MDEQ. Appendix B contains the Standard Operating Procedures and all checklists for the State Designated Laboratory. The third party data validator will be CDM's Laboratory Quality Assurance Officer.

Procedures used to validate data integrity are:

- Completeness of laboratory deliverable data package